INDEX

Volume 141 - January to June 1962

Aberthaw Station Site 753
Accidents, Factory 167, 251
Aden — Refrigerator Market ... 682
Agecroft "C" Power Station 856, 902
Aircraft Electrics 367
Aircraft Services "Trident" ... 114
Alternators Asynchronous Tests ... 273
Alternators Quick Starts 517
Aluminium Federation 489
Amenities 1034
America — Anti-Trust Actions 72; Columbia Alternatives 682; Consumer Protection 488; Gas/Steam Turbine Generation 665, 867; Generation Electrohydrodynamic 174; Generators 500MW 867; Heating Competition 219; Imports 931; Industrial Installations 630; Inverter — Tunnel Diode 316; Lamp Tungsten — Cool 716; Laser, Machining by, 1011; Light, Machining by, 1011; Lighting Fittings Exhibition 295; Magnethydrodynamic Advance 554; Mercury Lamp Improvements 482; Niagara, Robt. Moses, H.E. 964; Nuclear Explosion Power 138; Nuclear Power Dresden 720; Nuclear Power Peach Bottom 381; Nuclear Reactors 305; Plant Combined Cycle 928; Power Conference 630, 665, 785, 867, 916; Power Station — Slurry Burning 73; Priest Rapids 29, 964; Rectifier Currents, Limiting 1014; Refrigeration Thermo-electric 341; Research 656; Semi-metals-Bismuth 109; Steam/Gas Turbine Cycles 665, 867; System Interconnection 937; Thermo-electric Generation 509; Transmission 750kV. d.c. 115; Wood Pole Tests 290.
Appliance Industry 27
Appliance Sales — 218, 263, 378, 414, 491, 524, 564, 602, 799, 996
Appliance Sales — Area Board 183, 299, 487, 676, 959
Apprentices Compulsory Registration? 641
Argentina — Buenos Aires Loan 151; El Cadillal H.E. 189; Imports 637; Nuclear Power 643; Villa Constitucion Extension 72.
Association of Public Lighting Engineers 524, 923
Association of Short-circuit T.A. ... 691
Association of Supervising Electrical Engineers
Computers in Industry 89
Consumer Protection 664
N.I.C.E.I.C. — Five Years ... 289
Survey 911
Atomic Energy Authority 527
Molten Lead Tests 873
Report 714
Austria Pumped Storage 33
Australia — Imports 185, 569, 722; Industry 115, 841; Snowy Mountains 73, 419, 899; Snowy Mountains Cables 589; Snowy Mountains Finance 189; Snowy Murray I 928; Snowy Tumut II 758.
New South Wales — Distribution Plan 720; E.C. Report 801; Northern Rivers Loan 801; Sydney Cables 605; Sydney Distribution Transformers 928; Transmission Lines 33.
Queensland — Brisbane Talks 999; Burdekin Project 1035; Callide Power Station 115; Electricians Licensing 567; Power Finance 683; S.E.C. Report 225; Supply Finance 305; Swanbank Plant 189, 605, 999.
South Australia — Torrens Island Station 342.
Tasmania — Catagunya H.E. 928; Fingal Valley Coal 342; H.E.C. Report 841; Lower Derwent 189; Mersey-Forth H.E. 567; Poatina Progress 189.
Victoria — Briquette Losses 683; Hazlewood Power Station 419, 493; Plant 225; S.E.C. Report 142.
Western Australia — Kalgoorlie Diesels 342; Kalgoorlie Finance 265.

Authors:
Ash, D. O., and P. Dey, Moulded Resin Components for Lines ... 41
Brooker, D. G., Lighting Grid Control 481
Care, N., Packaged Switchgear ... 197
Carter, D. L., and E. H. Harrison, Motors for Extreme Weather ... 903
Crawley, W. P., and A. T. Newman, C.T. Polarity Indicator ... 699
Davies, H. A., and E. Roscoe, Meters House Service ... 651, 849
Dey, P., and D. O. Ash, Moulded Resin Components for Lines ... 41
Hancock, N. N., Computer for Induction Motor Performance 935
Harrison, E. H., and D. L. Carter, Motors for Extreme Weather ... 903
Hubble, L. H., Fluorescent Lighting Norm 1025
McDonald, F. G., Conductors for 400kV Lines 669
Mellanby, J., Export English ... 48
Mosland, O. P., Transistorised Synchronisation 12, 102, 159
Neidle, M., Lighting Cables ... 547
Newman, A. T., and W. P. Crawley, C.T. Polarity Indicator ... 699
Newman, S. E., and R. P. E. Tabb, Switchgear — Power Stations... 971
Onyemelukwe, C. C., Transmission System Design 123, 351
Robbins, J. A., Miniature Circuit Breakers 457, 506, 619, 743
Roscoe, E., and H. A. Davies, Meters House Service ... 651, 849
Rushton, J., and K. Yeates, Protection—Transformer Circuits... 3
Smith, H. P., Shock Effects ... 85
Stanforth, B. L., Distribution Voltage Regulation 578
Stewart, J., Lamps, Tungsten Iodine 667
Tabb, R. P. E., and S. E. Newman, Switchgear — Power Stations... 971
Thompson, J. E., and J. T. Wilkins, Transformer Noise — Lamination Flatness 233
Ward, I. M. L., Ring Mains in Delta 689
Watts, J. L., Motors s.ph. Check Testing 97
Welford, J., Transmission Towers 591
Whittaker, D., Installation Testing 389
Wilkins, J. T., and J. E. Thompson, Transformer Noise — Lamination Flatness 233
Wilkinson, K., Small s-c Motors 613, 695, 1007
Yeates, K., and J. Rushton, Protection Transformer Circuits ... 3

Bahamas — E.C. Report 720
Bermuda — Diesel Plant 879
Batti-Wallah's 188, 380, 491, 565, 926
Berkeley Nuclear Station — On Load 993
Blyth "B" £37/kW. 798
Boiler Drakelow "C" 375MW. ... 1012
Boiler Drum Welding "On Site" ... 50
Bradwell Nuclear Station 413
Brazil — Loans 33; Nuclear Power 33, 72; Parana H.E. 643; Power Plans 115.
British Electrical and A.I. Research Association ... 218, 491, 1034
Annual Report 655
Cartridge Fuses 281
Electronics 417
Generator Reactances 1022
Lightning Pattern 141
Luncheon 731
Paper, Oil-impregnated, Discharges 47
Projects 873
Reports 15, 47, 141, 281, 714, 891, 955, 1022
Rural Electrification 891
Structures — Gale Effects... ... 714
Tracking Resistance 955
British Electrical and Allied Mnfrs. Assn.:
Annual General Meeting 488
Annual Report 361
Appliance Sales 524
Contract Formulae 119, 307, 496, 646, 844, 1002
Cooker Section 67
Exports and Imports Analysis ... 960
British Electrical Power Convention 892, 943
British Guiana — H.E. Potential ... 758
British Institution of Radio Engrs.... 798
Industrial Electronics 627
Joint I.E.E. Committee 1029
British Iron and Steel Research 555, 652
British Lighting Council ... 184, 922

British Nuclear Energy Society:
Nuclear Future 913
Nuclear Waste Handing 320
Plutonium Prospects 176
British Electrical Approvals B.:
Publicity 713
British Productivity Council... ... 185
British Railways 874
Crewe-London 300
Derby Wks. Back-pressure Sets ... 104
Diesel Electric Locos 923
Eastern Region 600
Electro-diesel Locos ... 262, 344
Glasgow-Gourock 300
Substation — Compact 362
25kV. Clearances 677
British Refrigeration Assn. 563
British Standards:
Conductors o/h Line — Covered 593
Conference on Standards 942
Metric 799
Socket-outlets 178
Specifications 26, 178, 412, 593, 988
Resistance Measurements 178
Wiring Colour Code 412
British Transport Commission ... 184
Report 1030
British Welding Research Assn. ... 873
Brush — Ljungstrom Turbines End 1029
Building Research Station 83
Annual Report 284
Lighting Drawing Offices 235

Cable, Channel, Fault 146, 298, 491, 576
Cable Telephone — Australia — S.E. Asia 603
Cable Telephone — "Cantat" ... 237
Cable Tenders 67
Cable — Oil-filled, Largest ... 529, 754
Cable Prices 763
Cable Sheaths, Polythene Welding... 633
Cables — Lead Sheath Corrosion ... 222
Cables for Lighting, M. Neidle ... 547
Cables — Snowy Mountains 330kV. 589
Cables — Water Cooled 510
Cables 330kV. Tester 730
Cabling Integrated Steelworks ... 461
Canada — Appliance Mission 414; Appliance Sales 224; Cable Merger 224; Generating Capacity 224; Industry 189, 224, 305, 493, 531, 682, 841, 964; Lamp Prices 801; Mergers 305; Nuclear Conference 926; Nuclear Power, Douglas Point 964; Nuclear Reactors 265; Tenders Troubles 682, 801; Transmission Grid 72, 265, 567, 605.
Alberta — Edmonton Plans 928; Wabamum Station 720.
Baffin Island — Frobisher Bay Station 1035.
British Columbia — Clayton Falls H.E. 72; Columbia Licences 841; Columbia and Peace 72, 381; Peace Co. to Sue 682; Peace Work 567; Takeover Supply 189, 342, 605; Transmission Lines 342, 879; Transmission Link with U.S. 33; Victoria Cabling 879.
Labrador — Twin Falls H.E. 1035.
Manitoba — Nelson River H.E. 605; Report 531.
New Brunswick — Tidal Survey 643.
Newfoundland — Hamilton River H.E. 305; Transmission Lines 419.
Nova Scotia — Power Survey 265; Transmission Lines 189, 224; Tufts Cove Station 682.
Ontario — Heating Load 342; Helicopter Work 115; Lakeview 33, 305; Ottawa Cables 115; Rd. L. Hearn Station 187; Toronto Station 964; Transmission 72, 115.
Canada—Continued
Prince Edward Island — Charlottetown Station 720.
Quebec — Montmorency Falls Modernisation 758; Nationalisation 381, 493, 682; Power Takeover 720; Shawinigan Plans 531; Shawinigan Steam Plant 643.
Capacitors — West Weybridge ... 355
Central Electricity Generating Board:
Amenities Care 492
Computors 543
Gas Turbines 713
Headquarters 218
National Control Room 511
Plant Commissioned 69, 90
Power Station Sites N.W. ... 298
Research Laboratories ... 28, 338, 727
Television Load 925
West Weybridge Capacitors ... 355
Ceylon — Imports 192; Village Supplies 801.
Channel Islands:
Guernsey Report 263
Chief Technical Assistants Assn.: Off-peak Trends 220
Chile — Imports 268; Pullinque H.E. 115.
C.I.G.R.E. 858, 938, 985
Transmission 700kV. 985
Circuit-breaker Arc Theory 128
Circuit-breakers SF_6 filled 166
City and Guilds Courses 1032
Colombia — Bogota Plans 879
Computer — Induction Motor Performance, N. N. Hancock... ... 935
Computer — Steel Control 148
Conduit — Fibre — Laying ... 584
Congo — Katanga H.E. 8
Consumer Protection 664
Consumers' Advisory Council 184, 303, 1033
Consumers' Assn. 303, 490, 529, 641, 799, 963
Consumers "Choice"... ...148, 263, 303
Cooling Tower Dry 887
Copper Development Assn. 598
Crane Conductor Protection ... 101
Cuba — Debts 963
Czechoslovakia — Imports 27; Industrial Exhibition 874.

Department of Scientific and Ind. Research Report 997
Diesel generators — Stand by ... 101
Discount Stores 113, 218, 260
Discounting Practice 787
Distribution Voltage Regulation, B. L. Stanforth 578
Dominican Republic — Hydro Surveys 72.
Dordec 146, 299, 416, 796
Drakelow "C" Power Station 993, 1012
Ducting Fibre Installation 584

Earthing Policy 921
East Midlands E.B. 69
Consultative Council ...417, 921, 924
Eastern E.B. 31, 717, 874
Consultative Council 417
Substation Remote Indication ... 205
Eastern Europe Links ... 72, 567
Education — Robbins Committee... 260
Egypt — Cairo Underground 531; Hungarian Cable 419.
Eire — Cork Power Station 375; E.S.B. Peak Load 67; E.S.B. £2M Reinforcement 262; Interference Regulations 111; Ringsend Power Station 187; Rural Supplies 756, 1033; 120MW Station 794.
E.L.C.B. Differential Current ... 66
Electric Light Fittings Assn.... 922, 1033
Annual Report 553
Electric Vehicle Assn. ... 528, 757
Electrical Assn. for Women ... 604

Electrical Contractors Assn. 488, 638, 756
Dinner 275
Electrical Development Assn. 69, 417, 565, 678
A.G.M. 738
EDA/EAW Conference 186
Kitchen Design 555
Luncheon 789
Public Speaking 796
Rural Electrification Conference... 676
Sales Conference and Exhibition 114, 238, 291, 328
Electrical Engineers Exhibition 336, 399, 425, 469
Electrical Industries Club ...492, 642, 998
Electrical Power Engineers Assn.:
Meter Group 639
Electrical Trades Com. Travellers 302, 1032
Electrical Trades Union ... 184, 262
Election Action Appeal 111
Legal Actions ... 31, 71, 491, 754
Presidential Question 925
Wage Rates 637
Electrical Wholesalers Federation: Annual Dinner 505
Electricity Council:
Earthing Responsibility 921
Heaters Block Storage 489
Supply Statistics 375, 875
Electron Beam Welding 631
Electronic Engineers' Assn. 303
Electrostatic Coating 407
Ethiopia — Telephone Loan ... 928
European Common Market:
Appliances 185
External Tariffs 112, 415
European Free Trade Assn.... ... 998
European Power Exchange 580
European Rural Supplies 105
European Set Sizes 164
European Supply Saturisation ... 770
European Union of Electrical Wholesalers 341
Exhibitions and Shows:
Cologne Fair 315, 356
E.D.A. Sales Conference 238
Electrical Engineers 336, 399, 425, 469
Hotel and Catering 182
Ideal Home 370
Industrial Research 638
Mechanical Handling 784
Physical Society 57, 143
Refrigeration Fair 622
Explosion Report — Fulham ... 561
Export Council for Europe ... 527
Export Credits ... 222, 298, 797, 925
Export English, J. Mellanby ... 48
Export Incentives 183, 299, 340
Exports and Imports 20, 177, 331, 519, 707, 866, 1023

Factories:
Hydro Plant 279
Ice Cream 783
Meter Components 335
Paper Mills 405, 676
Seamless Tube Mill 914
Soap Computer Controlled ... 977
Telephone Cables 255
Transistor 282
Fault Locator Live Line 701
Federation of British Industries: Export Incentives 340
Films 184, 186, 603
Fire Safety 409
Flameproof Terminal Box 559
Flameproofing Instruments 692
Flameproofing — Petroleum Industry 95
Fractional Motor Conference ... 795
France — Supply Industry Selling 127; Nuclear Power 175.
Fulham Explosion Report 561
Furnace — Blackplate Annealing ... 555

Furnace Vacuum Type 96
Fuse Arc Energy 281
Fuses "D" Type Expulsion Discrimination 137

Gas Industry 27, 560, 561, 997
Gas Turbine for Hams Hall ... 68
Gas Turbine Plant Packaged ... 1021
Generation Electrohydrodynamic ... 174
Generation — Unconventional ... 277
Generator Synchronisation, O. P. Mosland 12, 102, 159
Germany — Cologne Fair 315; Gas Turbine Explosion 146; Industrial Outlook 637; Industry 110; Linear Accelerator 84; Nuclear Power 928; Nuclear Reactors 342.
Ghana — Afam Station 33; Tema Station 151; Volta 33, 265, 605.
Glass High Temperature 510
Greenhouse Equipment 201
Greenhouse — Three Climates ... 149
Grid National Control Room ... 511

Heat Storage — Sodiums 590
Heat Treatment 980
Heat Treatment — Engine Parts ... 253
Heaters Block Storage ... 489, 962
Heating Churches 62, 283
Heating — Floor 183, 418
Heating — Greenhouse 201
Heating — Propeller Moulds ... 205
Heating — Road 874
Birmingham Underpass 564
Survey 376
Heating Steel — Soaking Pits ... 250
Heating — Stress Relieving ... 950
Heating and Ventilating Research ... 604
Hinkley Point "B" 599
Hong Kong — Cables 151; Hok Un Station 419; Industry 683; Supply Merger 758, 801; Switchgear 524.
Honours List 905
Hotel and Catering Exhibition ... 182
Housing Estates 301, 375, 413, 564, 604, 799, 960, 962, 1033
Hungary — Imports 185
Hunterston Nuclear Station 49, 563, 795 873, 921, 962

Iceland — Sog. H.E. 419
Ideal Home Exhibition 370
Illuminating Engineering Society ... 147
Lighting for Inspection 99
Photometric Testing 284
Summer Meeting 527, 733, 774
Import Duty Drawback 27
India — Assam Garo Hills Station 1035; Assam Gas Turbines 643; Bandel Thermal 720; Barauni — Polish Plant 928; Bhakra Contract 73; Bombay Plant 879; Damodar Valley Loan 305; Delhi Inquiry 73, 381; Durgapur Extension 151; Industry 33, 305, 342, 381, 567, 605, 720; Kanpur Plans 151; Kashmir Industrial Generation 72; Kerala Nationalisation 801; Madhya Pradesh H.E. Plans 115; Neyveli Soviet Plant 682; Nuclear Power 605, 964; Power Loans 342, 381, 605, 682; Power Shortage 964; Power Survey 225; Punjab Diesels 682; Puniab River Yamuna Scheme 999; Short-Circuit Testing 758; Soviet Plant 682, 841; Supply Re-planning? 841; Third Plan 493; Transformer Manufacture 342; Transmission Lines 801.
Industrial Electronics 627
Industrial Outlook and Orders 30, 378, 561, 679, 996
Industrial Structure Statistics ... 756
Institute of Physics and Physical Society 186
Institution of Civil Engineers:
Nuclear Concrete Shell Tests ... 206
Institution of Electrical Engineers:
Aircraft Electrics 367
Aircraft Servicing 203
Aircraft System Transients ... 730
Brushgear Reliability ... 467, 512
Calder Hall Ward Leonard Sets 467, 512
Conferences 28
Dinner 319
Faraday Lecture 302
Regenerative Breaking 583
Rural Supplies 396
Scholarships 756
Substation Remote Control ... 129
Summer Meeting 1030
Supply Automatic Control 657, 705
Television Conference 677, 924, 949, 978
Transmission System Design ... 51
Transmission 400kV. 462
Electronics and Communications:
Graham Clark Lecture 554
Xerography Techniques 466
Measurement and Control:
Flameproofing Instruments ... 692
Insulation Liquid Breakdown... 468
Nuclear Design Problems ... 772
Resistance Measurement ... 204
Semiconductor Switching ... 316
Television — Strip Inspection ... 670
Supply Section 799
Circuit-breaker Arc Theory ... 128
Ship Wiring 108
Substations Indoor E.H.V. ... 322
Utilisation Section:
Aircraft Generators 617
University Education 798
Institution of Mechanical Engrs.:
Alternators — Quick Starts ... 517
Ash Disposal 358
Auto Control of Machine Tools... 980
Margam Supercritical Boiler ... 400
Nuclear Power — France 175
Oil Refinery Maintenance ... 408
Pyrometry 748
Institution of the Rubber Industry... 337
Instrument C.T. Polarity, W. P. Crawley and A. T. Newman ... 699
Insulating Gases 767
Insulating Oil Mobile Service ... 217
Installation Testing, D. Whittaker ... 389
Insulation, Testing Plastics 483
International Atomic Energy A. ... 147
International Electrotechnical Commission 988
Ipswich and District E.A. 262
Iran — Gas Turbine Station 1021; Imports 931.
Iraq — Baghdad Supply 72
Isle of Man:
Douglas Extension 799
Douglas Heating Tariff 147
Israel — Domestic Safety Device 879; Domestic Supplies 879; Imports 993.
Italy — Sardinia d.c. Link 224; Supply Nationalisation 419, 964, 999, 1035.
Ivory Coast — Ayame H.E. 643

Jamaica — Conversion Scheme 929; P.S.C. Report 531.
Japan — Exports to U.K. 27; Frequency Converters 758; Nuclear Power Tokai 561; Power from Oil 305; Sambor H.E. 381; Synthetic Diamonds 963; Trade Mission 529; Trade Survey 756.
Jordan — Imports 268; Pumps Loan 33.

Katanga — H.E. Power 8
Kenya — Electricity Sales 999
Kingsnorth Power Station 794
Kitchen Design 555, 754
Korea — Diesel Plant 305; Power Loan 531.

Laboratories:
Central Electricity Research ... 757
Non-destructive Testing 592
Pumps 854
Relay Stability Test 749
Road Transport 173
Simulated Fuel Elements... ... 950
Lamps, Tungsten Iodine, J. Stewart 667
Lead Development Assn. 222
Legal:
Burglar Alarm Patent Action ... 111
Coal Shortweight 184, 713, 755
Crimping Tool Patents 301
Electrocution, Faulty Wiring Claim 716
E.T.U. Actions ... 111, 149, 491, 754
Ffestiniog Railway 222
Fire Cause 925
Fraudulent Abstraction Dismissed 261
Gas, Low Pressure 561
General Electric v. Customs 637, 678, 753
Hire Purchase Frauds Alleged ... 798
Jointer's—Solder Burns Claim ... 29
Kingston Fuel Case ...184, 713, 755
Kite Accident Claim 926
"Know-how" Tax 378, 959
Resale Price Maintenance 301, 414, 489
Sewing Machines False Label 187, 379
Water Pipe Earth Death 488
Lighting — Aluminium Mill ... 671
Lighting — Artificial Sky 562
Lighting — Building Construction ... 249
Lighting Cables, M. Neidle 547
Lighting Coventry Cathedral ... 855
Lighting — Drawing Offices... ... 235
Lighting Eqpt. Development C. 922, 1033
Lighting, Fluorescent-Norm, L. H. Hubble 1025
Lighting, Grid Control, D. G. Brooker 481
Lighting, High Level Maintenance... 408
Lighting Hospitals 83
Lighting — Industrial T/V 978
Lighting for Inspection 99
Lighting Levels 984
Lighting — Little Barford Power Station 217
Lighting — Photometric Tests ... 284
Lighting — Theatres 563
Lighting — Television Studio ... 949
Lighting — Wandsworth Town Hall 640
Lightning Pattern 141
London E.B. 185, 562, 923
Consultative Council 417
Off-peak Trends 220, 525
Queensway Showroom 1033
Tariffs 525
London Transport:
Faraday Substation 876
Regenerative Braking 583

Macao — Plant 33
Mackenzie, Scots Supply Ind. Committee ... 187, 337, 418, 565, 679
Maintenance:
Lighting — High Level 408
Oil Refinery 408
Malaya — C.E.B. Report 955
Manchester Association of Engineers 174
Manufacturing Progress:
Associated Electric Industries ... 244
Crompton Parkinson 297
English Electric 60
G.E.C. (Eng.) 212
Parsons, C. A. 21
Materials for Electrical Design 62, 140, 216
Mauritius — Cyclone Damage 381; Eau Bleue H.E. 224.
Mechanical Handling Exhibition ... 784
Mercury Vapour Rectifiers 252

Mergers, Agreements and Co-operatives:
A.E.I. Welding 753
Batteries 993
Cable Machinery 1029
C.b's SF_6 G.E.C.(Eng.) — Westinghouse 166
Collaro — Magnavox 490
Dorman and Smith — Britmac ... 753
Electrolux — ASEA 717
Electron Physical — Hilger and Watts 925
G.E.C. — Pirelli-General ... 221
Heatrae — Centramic 413
Higgs Motors — Newman Ind. ... 993
London E. Wire — Printed Circuits 524
Magnetic Tape 677
Murphy Radio 336, 637
Resistance Furnace 300
Semi-conductors, G.E.C. — Mullard 67, 713
Valor — Gatehill-Beco 794
Water Purification 922, 997
Watsham's Ltd. — Riley and Neate 876
Merseyside and N. Wales E.B. ... 797
Consultative Council ... 68, 528
Failure Report 563
Reinforcement 563, 604, 796
Reinforcement £3·2M 796
Tariffs 715
Meter — Ratio Type 976
Meters House Service, E. Roscoe and H. A. Davies 651, 849
Mexico — Imports 422
Midlands E.B. 639, 798
Area Amalgamation 524
Birmingham H.Q. 379
Consultative Council ... 339, 491
Development and Testing... ... 661
Tariffs 489
Miniature Circuit Breakers, J. A. Robbins 457, 506, 619, 743
Mining Electricians 653
Modern Materials 598, 711, 989
Monopolies Commission 413
Morocco — Nationalisation ... 419
Motor Starter — Vapourmatic ... 1015
Motor Terminal Box flp. 559
Motors for Extreme Weather, D. L. Carter and E. H. Harrison ... 903
Motors, Induction, Computing Performance, N. N. Hancock ... 935
Motors, Small s.c., K. Wilkinson 613, 695, 1007
Motors, s.ph. Check Testing, J. L. Watts 97
Motors, Linear 379

National Coal Board Report ... 912
National Electrical Contractors Trdg. Assn.:
Retailing Conference 148
National Eng. Laboratory 642
National Inspection Council 262, 289, 417
National Parks Commission ... 187
National Physical Laboratory:
Annual Report 773
Netherlands — Industry 531, 605; Traction Order 341.
Netherlands West Indies Plant ... 73
New Guinea — Upper Ramu ... 879
New Literature:
American Degree, The 211
A.S.E.E. Year Book 404
British Diesel Engine Catalogue... 94
British Transistor Diode and Semiconductor Devices Data Annual 780
Computer Applications 211
Directory of Opportunities for Qualified Men 910
Directory of Opportunities for School-leavers 330
Electrical Breakdown of Insulating Liquids 954

New Literature—Continued
Electrical Engineering Design Manual 954
Electrical Trades Directory ... 371
Electrical Who's Who 780
Electrical Year Book 371
Electricity Supply 954
Electricity Undertakings of the World 94
Exporter's Year Book 211
Foundations of Future Electronics 330
Fuel Economy, 1962 330
Glass Reinforced Plastics... ... 330
Graphiques des Fonctions Usuelles 211
Great Price Conspiracy 1032
Guide to the Metric System ... 954
History of Electrical Eng.... ... 588
Industrial Research in Britain ... 862
Kempe's Eng. Year Book... ... 371
Lloyds Register of Shipping ... 528
Metal Industry Handbook ... 626
Microphones 954
Nationalisation in Britain ... 552
Newnes Concise Encyclopaedia of Electrical Engineering 910
Noise in Electrical Circuits ... 211
Plastics Progress 371
Power Policy for Britain... ... 94
Power Reactor Experiments, Vols. I and II 552
Power from the Sun 954
Redgraves Factories Acts... ... 780
Relais Electromagnetiques ... 330
Sell's Bldg. and Civil Eng. Trades List 626
Sight, Source and Surface ... 862
Static Power Converters 626
Technique de l'empioi des relais dans machines automatiques ... 862
Territorial Analysis of U.K. Exports and Imports 960
Using Transistors 780
New Year Honours 19
New Zealand — Auckland Report 225; Benmore H.E. 683; Cable Plant 531; Imports 602; Industry 531, 1035; King County H.E. 964; Lamp Agreement 493; Lighting Aluminium Mill 671; Reorganisation 928; Transmission Lines 758 Wairakei Geothermal 394.
Nigeria Imports 646
North Borneo Imports 192
North Eastern Electricity Board ... 637
Reinforcement £1M 218
Rural Supplies 874
North of Scotland H.E.B. ... 29, 491
Carolina Port Station ...150, 603, 877
Cruachan Storage Scheme ... 794
Dundee Extension 336
Kincardine Reinforcement ... 111
Laidon H.E. Project ... 565, 601
Loch Awe 960
Loch Glashan Station 27
Loch Turret 302
Report 318
Survey 174
Tariffs 873
North Western E.B. 487, 676
Consultative Council 560
Northern Ireland:
Belfast Coal 262, 756
Coolkeeragh extension 795
Power Authority? 560
Norway — Hydro Schemes 841; Rural Supplies 189; Tokke H.E. 265.
Nuclear Power:
Beryllium Canning 146
Fuel Life 219
Losses 755
Reactors:
Daphne 337
Dragon 793
Hero 259
Joint Research 259

Nuclear Power Reactors—Continued
Model Concrete Pressure Vessel Tests 206
University 642
Winfrith Heath 793
Sites 30
Edern 298
Lleyn Peninsula 67
Stations:
Berkeley 301
On Load 993
Bradwell 413
Calder Hall 875
Concrete Pressure Vessels ... 111
Dounreay 264, 961
Dungeness 149
Hinkley Point "B" 599
Hunterston 49, 563, 795, 873, 921, 962, 1020
Oldbury 337
Sizewell 597
Trawsfynydd 376, 950
Wylfa 22, 237

Oil — Arc Cooling 15
Oil Blender — Electronic 716
Oldbury Nuclear Station 337

Packaging, Electronics Aid 633
Pakistan — Distribution Loan 225; East Investigation 964; Imports 762; Indus Potential 73; Industry 841; Karachi West Wharf 381, 605; Karaphuli Hydro Electric Project 493, 605; Lyallpur Report 151; Mangla Finance 115; Nuclear Power 605, 643, 999; Power Loans 265, 605; Power Nationalisation 189; Power Plans 342; Power Survey 342; Railway Electrification 643; Sukkur Thermal 531; Supply Reorganisation 305; Switchgear Duty 921; Transmission Lines 265, 419; Village Supplies 381, 682.
Panama — Gas Turbines 758
Paper, Oil-impregnated, Discharges 47
Parliament and the Engineer ... 554
Parliamentary:
Accidents, Domestic 220
Advisory Council on Scientific Policy 69
Apprentice Education 924
Budget 599
Christmas Breakdowns 112
Coal Prices 797
Colleges of Advanced Technology 377
Consumer Protection 114
Consumer Test Registration ... 184
Department of Technical Co-operation 640
Education 377
Electricity Prices 961
Emergency Power Supplies ... 877
Export Incentives 638
Exports 527
Fair Trade Practices Bill... 221, 338
Fuel Consumption 600
Heating, Central, Rateable ... 755
Liverpool Power Bill 794
Nationalised Industries Select Committee 491
Meter Reading 602
Monopolies 301
North of Scotland:
Flood Prevention 526
Rent Increases 526
Tariffs 923
Nuclear Power:
Fuel Supplies 961
Hunterston Contract ... 921, 962
Licensing 146
Reactor NIMROD 924
Regulations 339
Unit Costs 298, 339
Pipeline Bill 379, 797

Parliamentary—Continued

Power Cuts 261
Purchase Tax Surcharge End 599, 922
Railway Electrification 960
Refrigerator Exports 796
Research Contracts 926
Restrictive Practices Court ... 336
Scottish Supply Inquiry 187, 337, 418, 565, 679
Signs for M1 ... ... 303, 755
Sizewell Cost 377
South of Scotland Tariffs 601
South Western E.B. Finance ... 376
Street Lighting 300
Supply Failure Insurance 264
Supply Industry Finance 600
Supply Industry Target Surplus 560, 601
Technical Co-operation 640
Water Control 639
West Thurrock Labour 186
Whitebirk Pollution 959
Peat Uneconomical 487
Permanent Magnet Assn. 961
Personal Call Alarm 782
Peru — Montaro H.E. ...189, 493, 928
Physical Societies' Exhibition 57, 143
Pitch Fibre Pipe Assn. 584
Plant Orders and Outlook 114, 183, 302, 876
Plastics Centenary Year 1031
Plastics Institute 337
Insulation Testing 483
Poland — Imports 997; Locos 698; Trade Mission 488, 562.
Polarity Indicator C.T., W. P. Crawley and A. T. Newman ... 699
Portugal — Appliance Market 70; Cable Order 964.
Power Breakdown 68
Power Cuts 29
Power Station Efficiencies 545
Power Station Ratio Meter ... 976
Power Station Switchgear, R. P. E. Tabb and S. E. Newman... ... 971
Power Stations:
Agecroft "C" 856, 902
Bankside 510
Blyth "B" 715, 798
Carolina Port 150
Cockenzie 259, 1030
Drakelow "C" 993, 1012
Ferrybridge "B" 517
Hams Hall "C" Tests 273
Ironbridge Station No. 2 714
Kingsnorth 794
Little Barford 217
Loch Glashan 27
Methil 259
Northfleet Tests 273, 517
Ratcliffe-on-Soar 1031
Rugeley 887
St. James' (Singapore) 147
Staythorpe "B" 736
Stenungsund (Sweden) 130
Wairakei Geothermal 394
West Thurrock 336
Power Supply 179, 334, 523, 712, 1024
Price Leadership 639
Problems and Practice ... 23, 254
Process Line Analysis 132
Progress in Patents:
Alternator Excitation 739
Battery Electrodes Sintered ... 585
Boiler Hot Well Development ... 243
Boiler Ribbed Tubes 401
Circuit-breakers H.V. 907
Conductor Low Impedance ... 907
Connector 91
Connector Spring 243
Earth Lead Indicator, ... 91
Generation Thermionic 401
Lighting Airfield Runway... ... 585
Nuclear Reactor Safety Trip ... 401
Rectifier Gas-filled Protection ... 739

Progress in Patents—Continued

Tin-opener 91
Vibration Damper 907
Voltage Regulator Carbon Pile ... 243
Washing Machine 739
Wires, Cold Pressure Welding ... 585
Protection — Transformer Circuits, J. Rushton and K. Yeates... ... 3
Purchase Tax 796
Purchase Tax Surcharge End 599, 922

Radar Fault Locator 701
Radio Control — Mine Haulage ... 979
Radio and Television Retailers Assn. 299, 339, 416, 714
Hire Purchase Challenge ... 794
Ratcliffe-on-Soar Station Site ... 753

Readers' Views:
Aluminium in the Supply Industry 359
British Electrical Approvals Publicity 771
Cables Aluminium — 236, 280, 359, 397, 466, 545
Capacitors for Voltage Regulation 771
Circuit-breakers Current-Differential 360
Conductors for 400 kV. 732
Consumer Discussion 732
Cooker Controls ... 202, 465, 545, 582, 654
Cooker Grills 902
Dowsing 89
Dry Cooling Towers 1014
Earthing Responsibility ... 89, 202, 280
Ferranti's Papers 902
Flameproof Gasketed Joints ... 165

METEOR

Agricultural Market 388
Aircraft 196, 350
Aluminium Jointing 158
Amenities 2
Appliance Aspects in France ... 121
Banking Electronics 122
Bank Rate 687
Beaver Retrospect 1006
Berkeley — Operational 969
Boilers — Supercritical 1005
British Electrical and Allied Mnfrs. Assn. 349
British Electrical Approvals Publicity 687
British Electrical Power Convention 933
British Railways 1005
Budget 573
Cables for 750 kV. 726
Cables — Aluminium 455
Cables Inflexibles 500
Central Electricity Generating Board:
Plant Installed 80
Research Laboratories 725
Christmas Tree Lights 970
C.I.G.R.E. 847
Circuit-breakers SF_6 filled 158
Computers 538, 688, 934
Consumer Choice 122
Contracting Productivity 272
Cooling Tower Dry 886
Diploma in Technology 232
Distribution Reinforcement ... 387
Earthing 39, 271
Earthing Responsibility 885
Education 232
E.L.C.B's 39
Electrical Engineers' Exhibition ... 312
Electrical Research Assn. — Electronics 387, 650
Electronic Maintainability 122
Electronics to Specification 612
Engineering Culture 40
European Interconnection 574
European Rural Supplies 80
Exports 157, 349, 885
Fires — Electrical Origin 232
Flameproofing 80, 688
Gas Industry 969
Generation at 1,100°F 848
Grid National Control 500
Heated Ratepayers 612
Heating 196, 271
Higher National Certificates ... 934
Hire Purchase 10% Deposit 886, 969
Horticultural Exuberance 196
I.E.E. Conferences and Symposia ... 2
Industrial Outlook 848
Institution Collaboration 312
Insulating Gases 766
Kite Mark 649, 970
Lamp Cooling 726
Lighting Code 765
Lightning Investigation 121
Measurement of Resistance 196
Metric 766
Miniature C.B's 456
Modern Power Stations 500
Monopolies Probe 272
North of Scotland H.E.B.:
Finance 312
Inquiry 158
North of Scotland Tariffs 847
Nuclear Cost per kWh 349
Nuclear Fuel Elements 195
Nuclear Losses 725
Nuclear Power Stations:
Berkeley 969
Hunterston 499
Oldbury 311
Wylfa 311
Nuclear Safety 848
Opinions 350
Overseas Training Facilities ... 611
Parliament, Science in 538
Peat Report 456
Pipeline Prospects 350
Plant Outlook 311
Plastics Guide 456
Plug Mechanics 157
Power Breakdowns 2
Power Cuts 231
Power Station Design 1006
Power Stations — Underground ... 122
Pressure Action 538
Price Leadership 611
Protective Discrimination 726
Railway Electrification 650
Refrigeration Market 649
Resale Price Maintenance 499
Research 765, 1006
Restrictive Trading Practices Act ... 79
Resuscitation — Mouth to Mouth 388
River Authorities 612
Safety 39, 1006
Safety — Building Sites 231
Scottish Supply Inquiry 886
Ships Standards 79
South Wales Selling 574
Substation Delta Connections ... 688
Substation Siting 387
Supply Earnings Target 537
Supply Industry Surplus 933
Switchgear Packaged 195
Switching, Quick 970
Transformer Noise 232
Transmission 39, 40, 455, 575, 650, 970
Turbo-alternator Transients Tests ... 272
Vehicle Lighting 538
Voiceprints 934
Wiring Adequate 40
Wiring Tests 388
Wylfa Nuclear Station 2

Readers Views—Continued
Fused Plugs 465
Heaters — Block Storage 360, 581, 654
Heating Bedrooms 9
Heating Floor Costs 1014
Heating Load — Area Boards ... 398
Heating Policy 10
Heating Storage Ducted-air 359, 465, 545
Industry and the Older Man ... 772
Lamps Three-level Tungsten 772, 902
Managerial Salary Claim 359
Miniature Circuit-breakers Time Delays 9, 50, 397, 465
Plant Commissioned 280
Plug Connections 165, 236
Plugs — Clumsy 1014
Plugs Miniature 360
Polarity Indicator C.T. 771
Retailing 902
Shock Effect 165, 237, 280
Socket-outlets 165
Synchronising Principles 165
Testing Adequate 771
Testing Compulsory 581
Transmission, Cheaper 654
Waste Disposer Tests 732
Water Heating Choice 465
Wiring — Adequate 89, 236, 281, 654
Wiring Plugs 50, 202, 466
Recloser Vacuum High Current ... 10
Rectifier Currents, Limiting ... 1014
Refrigerator Market Survey ... 675
Relays, Transistor, O. P. Mosland 12, 102, 159
Remote Control — Substations 129, 205, 282
Resale Price Maintenance ... 787, 924
Restrictive Trade Practices Act:
Permanent Magnets Upheld ... 961
Price Information Agreements ... 113
Telephone Apparatus ... 560, 599
Rhodesia and Nyasaland — Copperbelt Transmission 313; F.P.B. Report 582; Kariba 531, 801, 964; Kariba Report 582; Kariba Tariffs 999; Locos 493; Melsetta — Chipinga H.E. 758; Nkula Falls 265; Salisbury Report 559; Salisbury's Problem 72.
Ring Mains in Delta, I. M. L. Ward 689
Road Transporter — Largest ... 701
Royal Society of Arts ... 416, 518
Rugeley Power Station 887
Rumania — Control Gear 754; Imports 219.
Rural Electrification 891
Rural Supplies — World 396
Russia — Nuclear Power Visit 562; U.K. Trade 417, 924; Volgograd Largest H.E. 643; Welding by Radiation 989.

Sarawak — E.S.C. Report 419; Plant Required 928.
Satellite Instrumentation 603
Saudi Arabia — Gas Turbines 531; Plant 151.
Scientific Instrument Mnfrs. ... 603
Scottish Energy Resources 786
Scottish Peat Committee 487
Scottish Supply Inquiry 187, 337, 418, 565, 679
Semiconductor Switching 316
Semiconductors Symposium ... 242
Ship "France" 139
Ship — Mersey Dredger 63
Ship "Transvaal Castle" 81
Ship Wiring 108
Ship 80,000 ton Tanker 668
Shock Effects, H. P. Smith 85
Sierra Leone — Power Finance ... 720
Singapore — Cables 419; St. James' Power Station 147.
Sizewell Nuclear Station 597
South Eastern E.B. 717
Tariffs 873
South Africa — Appliance Standards 111; Cape Town, Athlone Station 224, 929; Cape Town, Dock Road End 758; Cape Town, Escom 224; Imports 35, 336, 496, 599; Locos 305; Nuclear Power 999; Orange River H.E. 531; Rural Supplies 493; Wiremen Registration 643.
South of Scotland ... 599, 602, 1030
Airdrie Showroom 409
Amenities Care 602
Annan Showroom 716
Cockenzie — Power Station 259, 1030
Consultative Council ... 563, 963
Fife Reinforcement 377
Glasgow Reinforcement 30
Instalment Plan 526
Methil Contracts 259
Off-peak Load 30
Report 504
Stirling Reinforcement ... 488, 963
Tariffs 259, 413
South Wales E.B.:
Consultative Council 874
Cwmbran Service Centre 111
Reorganisation 219
Rural Supplies 874
Survey 575
Tariffs 525, 564, 677
South Wales Engineers 260
South Western E.B. 414, 757
Chard Service Centre 962
Consultative Council 560
Finance 376
Standardisation 715
Substation Remote Control ... 282
Southern E.B.:
Consultative Council ... 183, 715
Fareham Substation 416
Tariffs 715
Wood Pole 132 kV. Line 501
Spain — Aceredo Falls H.E. 493; Huelva Loan 999; Valdecanos Plant 219.
Standards Engineers' Conference ... 906
Staythorpe "B" Power Station ... 736
Steel Melting Largest Electric ... 781
Steel Mill Tinning Line 220
Steelmaking "Kaldo" Precipitation 253
Street Lighting 960
Strikes 110, 336
Substation Remote Indication 205, 282
Substations Delta Connections, I. M. L. Ward 689
Sudan — Transmission 115
Superconductivity 756
Supply Industry Target Surplus 560, 601
Sweden — Appliance Design 871; British Trade Fair 340, 795; Hydro Survey 567; Nuclear Power 801; Stenungsund Power Station 130.
Switchgear — Modern 1015
Switchgear — Packaged, N. Care ... 197
Switchgear — Power Stations, R. P. E. Tabb and S. E. Newman 971
Switchgear 250 MVA 11 kV. Unit 596
Switching — Semiconductor ... 316
Synchronisation Equipment, O. P. Mosland 12, 102, 159
Syria — Euphrates H.E. 381; Five Year Plan 189.

Tanganyika — Pagani Progress ... 879
Tariffs 110, 413, 525, 564, 601, 677, 873
Technological Education 671
Telecommunications Eng. & Mnfg. Assn. 300
Telephone Apparatus Mnfrs. ... 560
Television — Sewer Inspection ... 301
Tester for 330 kV. Cables 730
Thailand — Appliance Market 70; Railway Plan 720.
Thorpe Marsh 550 MW Tests ... 700
Torbay Electrical Gp. 565
Tower Design, J. Welford 591
Towers Tyne Crossing 298
Trade, Around the, by Peregrin 11, 169, 321, 513, 660, 981
Transformer Circuit Protection, J. Rushton and K. Yeates 3
Transformer Noise — Lamination Flatness, J. T. Wilkins and J. E. Thompson 233
Transistor Production Plans ... 282
Transistor Symposium 654
Transistor Testing 242
Transmission Lines:
Bangor — Connah's Quay 67, 340, 528, 755
Conductors for 400 kV., F. G. McDonald 669
Copperbelt 313
Design 51
Fernhurst — Alton 641
Forth Crossing 599
Iver Heath — Chalvey 679
Lledr Valley 998
Moulded Resin Components, D. O. Ash and P. Dey 41
Severn Inspection Trolley ... 8
Sizewell — Sundon 69, 261, 338, 377
Towers, J. Welford 591
Trawsfynydd — Bangor ... 528, 755
Wood Pole Tests 290
Wood Pole 132 kV. 501
400 kV. Grid 462
Transmission System Design, C. C. Onyemelukwe 123, 351
"Transvaal Castle" Installation ... 81
Trinidad — E.C. Report 567; Port of Spain "B" 72, 151.
Tunisia — Imports 35

Uganda — E.B. Report 760

Vacuum Cleaner Germicidal ... 791
Voltage Regulation of Systems, B. L. Stanforth 578

Wages and Salaries 71, 110, 146, 298, 336, 524, 637, 675, 796, 925
Water Heaters Publicity 713
Welding Polythene Cable Sheaths ... 633
Welding Tube Auto Head 706
What the Chairmen Say 546
Wiring:
Adequate 375, 602
Adequate Testing, D. Whittaker 389
Dartford Tunnel 564
Notes by Megohm 53, 133, 207, 285, 363, 477, 549, 623, 694, 777, 863, 951, 1017
St. Paul's 317
Shell Centre 539
Ship "France" 139
Ships 108
Wythenshawe Baths 678
Worcester Electric Club 340
Wrist Watch 714, 875
Wylfa Nuclear Station ... 22, 337

Yorkshire Electricity Board ... 30
Consultative Council 601
Tariffs 601
Yugoslavia — Railway Engineers Visit 150

Zanzibar Imports 959

INDEX TO MANUFACTURERS

A-1 Electric Welding 753
A.B. Metal Products 561, 967
Aberdare Cables 798, 1031
Access Equipment 956
Advance Components 636
Aerialite Ltd. 1026
Aidas Electric 372, 921
Albright and Wilson 525
Allchin, E. F., Ltd. 522
Allen West 527, 754, 962
Allen, W. H. 641, 677, 854
Allied Ironfounders 294
Alma Components 106
Andrews Houseware 373
Anglo-American Vulcanised Fibre 598
Antex Ltd. 66
Anti-Dust Services 598
Ardleigh Spraying 557
Ascot Lamps 180
Ashley Accessories 485, 520
Asquith Electrics Ltd. 872
Associated Electrical Industries 27, 31, 84, 104, 114, 132, 220, 244, 261, 524, 592, 641, 698, 715, 749, 750, 751, 753, 791, 874, 923, 956, 1021, 1031
— Cable Division 372, 415, 510, 558, 596
Construction Division ... 461
— Electronic Apparatus 595, 870
— Hotpoint ... 27, 65, 708, 873
— Industrial Control Gear ... 709
— Lamp and Lighting 486, 496, 525, 533, 791, 876, 957
— Motor Control Gear ...28, 70
— Radio Components ... 1028
—Telecommunications Division 220, 920
— Traction Division 341
Associated European Sales 66
Associated Semiconductor Mnfrs. 713
ATER (London) Ltd. 959
Atlas Copco 215
Atlas Lighting 217, 410, 415, 491, 562, 635, 795, 919, 922
Audio and Video Rentals 301
Automatic Control Eng. 716
Automatic Telephone 526
Aveley Electric ... 296, 533, 561, 989
Avo Ltd. 145

Babcock and Wilcox ... 50, 142, 755
Bakelite Ltd. 989
Baldwin, H. J. 487, 560
Barrow, Hepburn & Gale 872
Bastion and Allen 920, 956, 962
Belling and Co. 520
Belling and Lee 877
Belliss and Morcom 1033
Bell's Asbestos 490
Belmos Co. 486, 1026
Benjamin Electric ... 338, 377, 556, 594
Berry's Electric 1026
B.I.C.C. — Burndy 919
Bill Switchgear 919
Birlec-Efco 555
Birmingham Sound Reproducers 69, 338
Bivac Air Co. 1028
Black and Decker 522, 792
Boughton, T. T., & Sons 374
Bowthorpe Hldgs. 69, 520
B. and R. Relays 181, 634
Bradbury Controls 268
Brattel Electric Co. 145
Bray, E. N. 991
Bribond Printed Circuits 598
Bridges, S. N.... 414
Bristol Siddeley 68
British Acheson Electrodes ... 600, 871
British Aluminium 150, 216
British Brown-Boveri 256
British Central Electrical 1028
British Electric Resistance 634
British Electrical Repairs 992
British Insulated Callenders Cables 101, 110, 180, 219, 317, 355, 414, 496, 589, 598, 599, 600, 603, 633, 698, 713, 754, 874
British Insulated Callenders Construction 489, 730
British Resin Products ... 258, 598
British Rototherm 411
Britmac Accessories 753
Brook Motors 675
Brookhirst-Igranic 639
Browning's Electric 522
Bruce Peebles 559, 796, 925
Brush Crystal Co. 24
Brush Electrical Eng. ... 877, 1029
B.S.R. Ltd. 882
BTR Industries 140
Burgess Products 1002
Burtonwood Eng. 931
Bylock Electric 926

Cambridge Instruments ... 876, 991
Capacitors Ltd. 35, 192
Carr Fastener 594
Catylators Ltd. 722
C.A.V. 113, 173
Cawkell Research and Development 496
Chatwins Ltd. 557
Chilton Electrical Products ... 332, 679
Chloride Batteries 25, 635
Cimex Ltd. 791
Clare Instrument 709
Clarke and Smith Mnfg. 112
Claudgen Ltd. 375
C.N.S. Instruments Ltd. 872
Cole, R. H. 1002
Collaro 490
Consolidated Ohmic Devices Inc. ... 871
Control Instruments 296
Controls Co. of America 181
Cooper Electroheat 50
Copperad Ltd. 556
Corisales Ltd. 374, 558
Cossor 633
Counting Instruments 791
Courtney Pope (Electrical) 372, 481, 673, 924
Crabtree, J. A. 64, 596, 878
Craig and Derricot 1028
Crane's (Dereham) 701
Crater Products 144
Crofts (Engrs.) 756
Crompton Parkinson 113, 250, 297, 333, 558, 751, 872, 950, 979
Crypton Equipment 635

Dale Electric (Yorks) 380
Davidson & Co. 28
Davis, John, & Son 959
De La Rue 794
De Laval Ljungstrom 967
Denham and Morley ... 333, 870
Dewhurst & Ptnr. ... 106, 522, 634, 956
Digital Eng. 958
Digital Measurement Ltd. 872
Dimplex Ltd. 485, 709
Dishlex (GB) 925
Dorman and Smith 753
Dow Chemical Co. 62
Drummond, John (Engineers) ... 870
Dubesco Laboratories 958
Duncan Ptnrs. & Price 107
Dunn, A., Ltd. 106
Du Pont de Nemours 140
Dynamics Ltd. 65

Efco 300, 980
Ekco Ensign 411
Ekco Heating ... 62, 486, 602, 750
Elcontrol Ltd. 708, 790
Elders Walker & Co. 35
Electric Construction Co. ... 30, 101, 673
Electric Divn. of Radiation ... 333
Electrical Apparatus Co. ... 918, 992
Electrolux 25
Eltron (London) Ltd. 871
Electronic Switchgear 1028
Electrothermal Eng. 485, 950
Elfido Floor Heating 227
Elkay Electrical Mnfg. 65
Elliott-Automation 29, 67, 112, 336, 876
Ellison, Geo. 1015, 1030
EMI Electronics 68, 376
EMP Electric 69
Enfield Rolling Mills 989
Enfield-Standard 227
Engel and Gibbs 990
English Clock Systems 791
English Electric 60, 144, 214, 219, 262, 279, 490, 521, 557, 594, 635, 677, 698, 713, 715, 872, 957, 1031
Domestic Appliances 610
Traction 753
English Electric Valve 641
Erma Ltd. 1026
Eve, J. L., Construction 8
Everett Edgcumbe 751
Evershed and Vignoles ...221, 256, 521

Farnell Instruments 992
Federated Foundries 256, 521, 595
Fenner, J. H. 28
Ferranti Ltd. 242, 335, 522, 602, 701, 794, 923, 976
Ferranti, Denis, Meters 672
Field, H. W. 996
Fielden Electronics 24, 294
Findlay Irvine 294, 790
Firth Cleveland 29, 112
Firth Cleveland Fastenings ... 722
Firth Cleveland Lang 263
Flatley, A. J. 146, 183, 218, 263, 638, 714, 797, 993
Fluxite Ltd. 602
Forgings and Presswork 711
Formica Ltd. 711
Foster Transformers 113
Fothergill and Harvey 258
Foundry and Metallurgical Eqpt. ... 205
Frais, Eric 257
Franco-British Electrical 710
Free Piston Engine Co. 147
Frigidaire 106
Furnascote Ltd. 140
F.W. Electrical Industries (Pty.) ... 66

Gardom and Lock 636
Gatehill Beco 794
General Electric 10, 174, 716
General Electric Co. 148, 221, 300, 561, 564, 600, 676, 706
(Domestic Equipment) 65, 180, 185, 410, 674, 959, 1033
(Engineering) 63, 96, 166, 212, 273, 557, 752, 792, 1027
(Lighting and Equipment) 641, 671, 960, 1027
Osram (G.E.C.) Ltd. ...561, 714, 878
Osram Lamp Division ... 107, 221
(Research) 337
General Eng. Co. (Radcliffe) ... 1031
GKN (Midlands) 107
Goblin (BVC) 215, 521, 556
Gold Star Domestic 373
Goodman, G. 710

Gosheron, John 216
Grampion Lighting 375, 595
Greening, N., & Sons 710
Greenwood, W. G., Electronic ... 708
Grelco Ltd. 333
Gresham Lion Group 533
Gulf Oil (G.B.) 217
Gulton Industries 64, 636
GVE Ltd. 636
G.W.B. Furnaces 253, 411

Hackbridge and Hewittic 717
Hanson and Edwards 1029
Hanway Bldg. Products 410
Harmer and Simmons 882
Harper, John, Ltd. 921
Harris and Sheldon 562, 601
Hartley Baird 560
Hawke Cable Glands Ltd. 871
Hawker Siddeley Brush Turbines ... 1029
Haynes Radio 107
Hayward Turbine Plastics 875
Heatrae ... 413, 522, 558, 958, 991
Heatstore Ltd. 556
Hedin Ltd. 24, 411, 1028
Heim Electric 956
Hellermann Ltd. 411
Heyes & Co. 991
Higgs Motors 920, 993
Hird-Brown Ltd. 25
Hirst Electronics 182, 636
Hiscock, Appleby & Co. Ltd. ... 871
Holmes, W. C. 722
Holophane Ltd. 791
Honeywell Controls 214, 533
Hoover 68, 295, 373, 563, 925
Howden, James — GEA Ltd. ... 27
Hughes International 1028

Imhof, Alfred 1027
Imperial Chemical Industries ... 711
Improved Appliances & Gen. Eng. 1027
Incandescent Ltd. 678
International Combustion ... 603, 1012
International Electronics 918
International Rectifier 752
Intertherm 1029

Jackson Boilers 920
Jackson Industries 147
Jobling, J. A. 140, 510
Johnson Matthey 140, 259, 711
Johnson & Phillips 137, 563, 596
Jones and Stevens 790

Kabelschlepp G.m.b.H. 557
Kangolone Ltd. 214
Kelvinator 25
Kenwood 332, 375, 594
Ketay Ltd. 422
Key Eng. 119, 307, 584
K.G.M. Electronics 783
Kinder, G. W., & Co. 527
KLG Sparking Plugs 64
K. and L. Steel Foundry 592
Knightshades Ltd. 521

Lancashire Dynamo 709
Landis and Gyr 708
Larmuth and Bulmer 1029
Laurence Scott 641, 668
Lec Refrigeration 258, 957
Lede Ltd. 295
Lemmer Eng. Co. 1002
Lesser, David C., & Co. 956
Lewispoint Hldgs. 182
Lexor Electronics 1027
Liquid Systems Ltd. 258
Loblite Ltd. 521

London Electric Wire 524
Londex Ltd. 216, 484
Lonor Ltd. 750, 792
Loughborough Oven Wks. ... 485, 871
Low, Archibald 66
Lucas Industrial Eqpt. 918
Lyon, Arthur 751

McGeoch, Wm. 339
Maclaren, R., & Co. ... 180, 520
McMichael Radio 603
Magnavox 490
Main, R. and A. 215, 332, 373
Mantle and Butterworth 594
Marconi 1027
Marine Eng. Co. 227
Marley Extrusions 711
Marryat and Scott 262
Marshall and Montgomery 711
Marubeni Iida Co. 672
Mawdsleys Ltd. 997
M.C.B. Co. (Manchester) 65, 76
Measuring Instruments (Pullin) 295, 791
Merchant Adventurers 595
Merlin Mouldings 992
Mervyn Instruments 595
Metalastik Ltd. 257
Metrix Instruments 792
Metway 181, 642, 673
Micanite and Insulators 632
Microcell Ltd. 216
Midland Electric Mnfg. ...214, 411, 991
Miller, Gordon 791
Millet Levens 524
Minerva Detector 878
Mirroware Ltd. 920
Modern Equipment 256, 372, 685
Moffats Ltd. 639
Monogram Electric 557
Monsanto Chemicals 632
Morgan Components 301
Morganite Resistors 960
Morphy-Richards 106, 372, 374, 524, 672, 752
MTE Control Gear 484
Mullard 188, 227, 256, 418, 558, 713, 878
Murex Welding 524

Nash and Thompson 181, 556
Nettle Accessories 24, 144
Newman Industries 993
Newmarket Transistors 636
Nife Batteries 751
Normand Electrical Co. 600

Omni (G.B.) Ltd. 62
Osma Plastics 258
Osram (G.E.C.) Ltd. 561
Otter Controls 1026
Ottermill Switchgear 634

Palmer G.A.S. 25
Parmiter, Hope and Sugden ... 877
Parsons, C. A. 21, 187, 700
Partridge Wilson 338
Parvalux Electric Motors 180
Paul, Derek, & Co. 991
Paynes Jiffytape 533, 989
Peppers of Woking 918
Permali Ltd. 188, 722
Perstorp Products 216
Philips 755
Phoenix Telephones 416
Photronic Controls 556
Pirelli — General Cable Wks. 96, 221, 339, 418, 529, 608, 634
Plannair Ltd. 870, 1026
Plessey 709, 710, 790, 871, 923, 957
Polypenco Ltd. 598
Pound, Joan, Ltd. 790
Powell Duffryn Heating 28

Power System Computers Ltd. ... 870
Precision Eng. Equipments 144
Preformed Line Products 967
Press Equipment 181
Pressed Steel Co. 182, 337
Preston Industrial Research... ... 594
Printed Circuits 524
Priolo, T. M. 258, 711
Pullin, R. B., & Co. 227, 413, 558
Pye 24, 205, 294, 296
Pye, W. G. 635
Pyrene Co. 214, 752

Racal Electronics 635
Radyne Ltd. 182
Railway Signal Co. 64
Rawlplug Co. 957
Redifon Ltd. 1029
Reliance Telephone 422
Remploy Ltd. 180, 992
Research and Control Ins. ... 484, 1029
Revo 332, 373
Reyrolle 485, 797, 957
Rheostatic 877
Richardsons, Westgarth ... 24, 185, 676
Roberts Electrical 215
Robinson, D. & Co. 710
Robinson, F. C., & Partners ... 374
Rogerson Page 558
Rolls Electromatic 218
Rolls Razor 876, 926
Ronson Products 29b
Russell Hobbs 375

Sadia Water Heaters 921
Salford Electrical Instruments ... 520
Salter, Geo. 636
SAMES (Gt. Britain) 407
Sangamo Weston 990
Sankey-Sheldon 257
Santon Ltd. 145
Schick Inc. (U.K.) Ltd. 871
Scholes, Geo. 66, 296
S.E.L.L. 990
Shandon Scientific Co. ... 673, 750
Shawford Control Gear 792
Siemens — Schuckert... ... 107, 1026
Sigmund Pulsometer Pumps... ... 69
Simmonds Aerocessories 722
Simms 1027
Simplex 182, 221, 299, 564, 708, 914, 923, 922
Simplus Horstmann 410, 919
Simplus Products 216
Singer Sewing Machines 601
Smart and Brown 112
Smart and Brown Connectors ... 967
Smith, W. H. 1002
Smiths 485, 685, 874
Sound Diffusion (Auto-Thermatic) 282
South Wales Switchgear 257, 338, 525, 798
Spembly Ltd. 918
Spencer (Melksham) 336
Square, D. ... 145, 181, 333, 919, 967
Stal — Laval (G.B.) 967, 1031
Standard Telephones 71, 188, 220, 282, 378, 487, 529, 600, 654, 875, 990, 992, 1034
Stanley — Bridges 414
Stanton and Staveley 803
Startronic Ltd.... 750
Stella Radio & Television 870
Stewart King Ind. 958
Stokvis, R. S. 410, 990
Stone, J., & Co. (Deptford) 107
Sturtevant Eng. Co. 486, 794
Submarine Cables 1032
Sulzer Bros. 762
Sumlite Controls 296
Summerscales, W. and S. 214
Sunbeam Electric 295, 674
Switchcraft (Sales) 484
Sylvania — Thorn 528

Tarmac Vinculum 598
Taylor Electrical Instruments ... 672
Technical Development Capital Ltd. 113
Telcon — Magnetic Cores 126
Telemechanics Ltd. 187
Telephone Cables Ltd. ... 255, 922
Telequipment Ltd. 918
Tempair Ltd. 337
Temperature Ltd. 182, 594
Thames Electrical 646
Thermodare 522
Thermotank 182, 1026
Thor Hammer Co. 257
Thorn Electrical Industries 65, 106, 148, 337, 751
Thornycroft, John I., & Co. ... 961
Thorpe, F. W.... 556
Timex 875
Tool Treatments (Chemicals) ... 258
Tricity Cookers ... 144, 332, 373, 417
Trimark Ltd. 294
Trist, Ronald 490
Troughton and Young ... 76, 489
Turners Asbestos Cement 600

U.A.M. Pipe and Ducting 562
Uddeholm Ltd. 716
Ultra Electronics 187, 302
U.S. Industries Inc. Eng. 931

Valentine Eqpt. 182
Valor Co. 794
Venner Ltd. 215, 484, 674, 870
Volcrepe Ltd. 62

Walsall Conduits 24, 676
Wandleside Cable 377
Wandsworth E. Mnfg. 296
Ward and Goldstone 636
Weir, G. & J. 379
Wessex Electrics 144
West Instruments 919
Westinghouse 166, 635, 709
Westool Ltd. 558, 595
Westrex Co. 635, 782
Wild, A. G. 710
Wild Barfield Ltd. 221
Wilkins and Mitchell 486
Woden Transformers 268
Wolf Electric Tools 295
Wolsey Electronics 561
Woods of Colchester 372, 603, 878
Wybourne-Satoba 64
1001 Lamp Co. 709